HEAT SINK AND METHOD OF MAKING THE SAME

ABSTRACT OF THE DISCLOSURE

A method for manufacturing a heat sink including heating a metal base to melt solder in grooves formed in the base. The base has a first coefficient of thermal expansion. The solder has a second coefficient of thermal expansion lower than the first coefficient of thermal expansion. The metal base and the solder are cooled and the metal base experiences tensile stresses and the solder experiences compressive stresses to form a concavity in a thermal face of the base. The thermal face is then planed. Over time, the tensile stresses and the compressive stresses reduce such that the thermal face becomes convex.